**SUPPLEMENTARY INFORMATION**

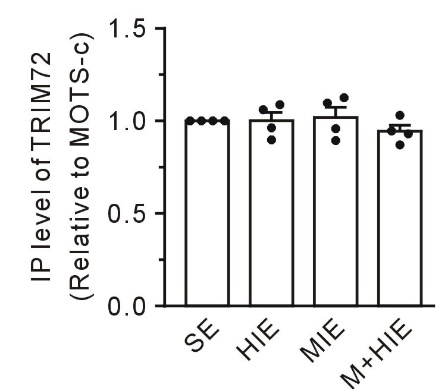
**Mitochondria-encoded peptide MOTS-c participates in plasma membrane repair by facilitating the translocation of TRIM72 to membrane**

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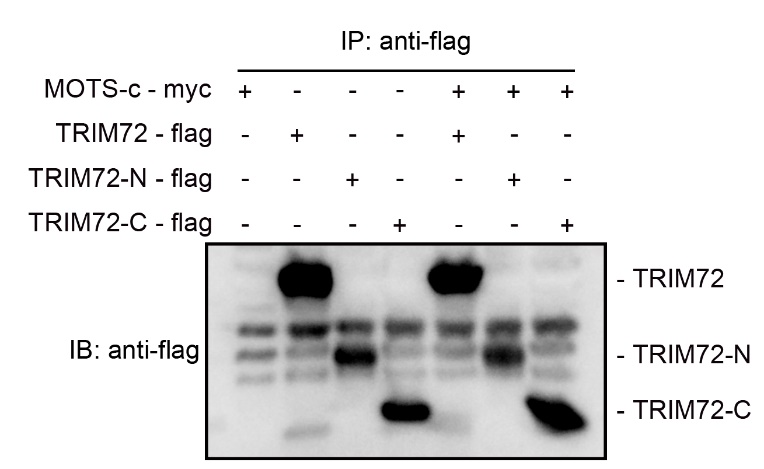
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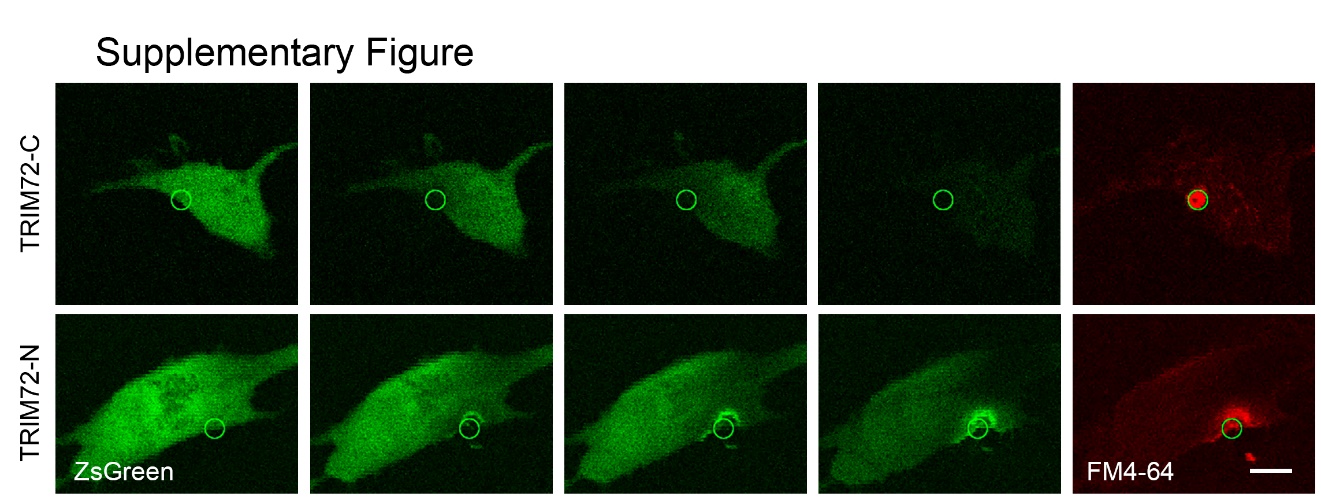
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**Suppl. Data 1.** Group results of the binding capability of TRIM72 targeted to MOTS-c. The densitometric ratio of TRIM72 to MOTS-c in immunoblots after immunoprecipitation (Figure 6E) is calculated, and then normalized to SE. The value is indicated as the binding capability. The data are expressed as the mean ± SEM using bars with scatter dot plots. Each dot represents an individual animal. There are no differences among groups.

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**Suppl. Data 2.** Representative flag immunoblots after immunoprecipitation. HEK293T cells were co-transfected with the myc-tagged pLV4Itr-mCherry-CMV vector, which overexpressed MOTS-c, and the flag-tagged pLV4Itr-ZsGreen-CMV vector, which overexpressed either the full-length TRIM72 or its N-terminus or C-terminus segments. The cell lysates were immunoprecipitated with anti-flag antibodies.



**Suppl. Data 3.** Representative time-lapse images showing membrane repair process. C2C12 cells were transfected with ZsGreen-tagged TRIM72 C terminus (TRIM72-C) or N terminus segments (TRIM72-N), and damaged using a pulsed laser in the presence of the FM4-64 fluorescent dye (red color). The green circle lines indicate the location of the damaged membrane. The injury intensity is indicated by FM4-64 accumulation. Scale bar, 10 μm.